Claims

1. Filtration system for filtering out particles from a liquid, comprising a filter body having a substantially radial symmetry, provided with a filter element having a substantially radial symmetry through which the liquid to be filtered is pressed in an substantially radial direction, wherein the liquid is pressed from the outside in.

2. Filtration system according to claim 1, wherein the filtration system is provided with a first outlet through which a first stream of filtered liquid, which has passed said filter element, may flow and with a second outlet through which a second stream of a substantial tangentially directed, alongside an outside of the filter element flowing liquid may flow.

3. Filtration system according to claim 2, wherein adjusting means are provided, for adjusting the first stream and the second stream, such that the first stream amounts in the range from 5% to 20% of the second stream.

4. Filtration system according to claim 2, wherein the filter element has a toroidal shape with a substantially rectangular cross section, of which the opposite annular shaped sides are impermeable for a liquid, the coaxial arranged tubular sides are made of a filter material and the toroid is filled with a matrix absorbing particles present in the liquid.

5. Filtration system according to claim 4, wherein said matrix comprises a resin.

6. Filtration system according to claim 4, wherein an

inside diameter of the filter element amounts in the range from 40% to 60% of an outside diameter of the filter element.

7. Filtration system according to claim 4, wherein the filter element is implemented as a cartridge.

8. Filtration system according to claim 4, wherein the filter element is provided with a filler body, for filling up a central cavity present in the toroidal shaped filter element.

9. Filtration system according to claim 8, wherein the filler body is at least partly made of a flexible material, and includes a cavity filled with a gas.

10. Filtration system according to claim 8, wherein said filler body is collapsable against an elastic return force at a first liquid pressure within said filter element and is underformed at a second liquid pressure within said filter element, wherein said first liquid pressure is higher than said second liquid pressure.

11. Filtration system for filtering out particles from a liquid, comprising a filter body having a substantially radial symmetry and an inner face and inside said filter body a filter element having a substantially radial symmetry, said filter element having a liquid impervious top face, a liquid impervious bottom face and a liquid permeable and particle impervious radial side face of filter material, which faces of said filter element are spaced from said inner face of said filter body providing a first liquid flow channel running within said filter body externally of said filter element from a liquid inlet at said inner face of said filter body opposite said top face of said filter element to a first liquid outlet for

unfiltered liquid at said inner face of said filter body opposite said bottom face of said filter element, from which first liquid flow channel a second liquid flow channel branches off at said radial side face of said filter element, which second liquid flow channel passess said radial side face of said filter element extends through said filter element onto a second liquid outlet for filtered liquid at said inner face of said filter body opposite said bottom face of said filter element, such that liquid to be filtered is supplied into said filter body through said liquid inlet, flows through said first liquid flow channel and than partially branches off into said second liquid flow channel to pass said filter element in a substantial radial, inward direction and leaves said filter body through said second liquid outlet as filtered liquid.

12. Filtration system according to claim 11, wherein said second liquid flow channel passess a matrix within said filter element, which matrix absorbs particles present in the liquid flowing through said second liquid flow channel, wherein said filter element has a central cavity that is filled with an elastically collapsible filler body which can be brought from an undeformed into a collapsed shape, and wherein said filler body provides a flexible wall of said second liquid channel within said filter element, which wall is impervious to liquid flowing within said second liquid channel, wherein said flexible wall of said filler body obtains a deflected position due to collapsing against an elastic return force of said filler body at a first liquid pressure within said second liquid channel within said filter element and is undeflected at a second liquid pressure within said second liquid channel within said filter element, wherein said first liquid pressure is higher than said second liquid pressure, and wherein said second liquid channel is expanded when said flexible wall is in its deflected position.

13. Filtration system according to claim 12, wherein said second liquid channel is filled with a liquid at said first liquid pressure, said filler body is collapsed and said second liquid outlet is closed such that when said first liquid pressure changes to said second liquid pressure, the liquid within said second liquid channel inside said filter element is pressed outward from said filter element through said radial side face of said filter element by the filler body returning to its undeformed shape.